Section 300.3. Residential, Commercial, Industrial, and Recreational Structures

A. Definitions

1. Residential buildings include houses, and other structures as defined as a building in Section R-115 of the Council of American Building Officials (CABO) Building Code, and the pertinent sections thereto which are used primarily for human habitation which are built on a shoreline feature or its contiguous area.

2. Commercial and industrial structures and operations on a shoreline feature, its contiguous area, or within tidal waters include all buildings and alterations to such features related to the manufacturing and interchange of goods or commodities, or any other business activity.

3. Recreational structures include swim floats, beach pavilions that are constructed for recreational purposes on a shoreline feature, its contiguous area, or in tidal waters.

4. Associated residential structures including but not limited to decks, porches, walls, boardwalks, swimming pools, roads, driveways, and shall in-clude other structures integral to or ancillary to a residential building including minor grading, filling or excavation typically 10 cubic yards or less.

5. Structural Lot Coverage is that part of a lot or parcel that is covered by roofed structures of at least 200 square feet in size. Structural Lot Coverage is calculated in square feet and is either equal to the total square footage occupied by one or more foundations, or, in the case of cantilevered structures, the total square footage occupied by the structure and calculated as if a foundation supported the cantilevered portions of the structure. Structural foundations shall be broadly interpreted to include sona-tubes, pilings, concrete blocks, columns, or other types of foundation material which provide structural support to a structure which is covered by a roof.

B. Policies

1. It shall be the policy of the Council to undertake all appropriate actions to prevent, minimize or mitigate the risks of storm damage to property and coastal resources, endangerment of lives and the public burden of post-storm disaster assistance consistent with policies of the State of Rhode Island as contained in the Hazard Mitigation Plan element of the State Guide Plan when considering applications for the construction of residential, commercial, industrial and recreational structures, including utilities such as gas, water and sewer lines, in high hazard areas.

2. It is the Council's policy to require a public access plan, in accordance with Section 335, as part of any application for a commercial or industrial development or redevelopment project in or impacting coastal resources.

In accordance with Section 120, a variance from this policy may be granted if an applicant can demonstrate that no significant public access impacts will occur as result of the proposed project.

C. Prerequisites

1. Applicants proposing new construction and/or alterations to existing structures shall obtain a letter from the local authorities certifying that proposed activities conform to the local zoning ordinance, or that if relief from an ordinance is required that it has been obtained and that the decision authorizing the appropriate relief is final.

This letter must be submitted to the CRMC with the application.

2. Applicants proposing new construction and/or alterations to existing structures shall demonstrate that all applicable requirements of the RISBC including those pertaining to construction within flood hazard zones will be met.

This demonstration shall be made by submitting to the CRMC at the time of application a building official's form properly completed and signed by the local building official.

3. Applicants proposing to build, repair or alter an individual sewage disposal system (ISDS) shall obtain a permit from the Department of Environmental Management and shall submit to the CRMC copies of the approved application and the approved plans. The plan submitted must bear a DEM/ISDS approval stamp.

4. Persons proposing activities that may impact the function of an existing ISDS and which by the rules and regulations of the Department of Environmental Management requires the issuance of a permit, shall obtain the necessary permits and

submit copies of these permits to the CRMC at the time of application.

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Applicants for industrial, commercial and recreational structures shall demonstrate that all state safety codes, fire codes, and environmental requirements have or will be met.

6. Applicants shall demonstrate that connections to public water supplies and sewer systems shall be authorized by the appropriate authorities when:

a) such connections are proposed by the applicant;

b) where on-site water withdrawal and/or sewage disposal will have a significant

2. The mining and extraction of minerals, including sand and gravel, from tidal waters and salt ponds is prohibited. This prohibition does not apply to dredging for navigation purposes, channel maintenance, habitat restoration, or beach replenishment.

3. Solid waste disposal and minerals extraction is prohibited on shoreline features and their contiguous areas.

4. The use of fill for structural support of buildings in flood hazard V zones is prohibited.

5. (a) New decks and structures, and expanded structures associated with residential properties, or non-water dependent commercial uses, are prohibited in or over tidal waters.

(b) Decks associated with commercial properties are prohibited in or over type 1 waters. Decks associated with commercial properties are prohibited in or over Type 2 waters unless such use is reserved in connection with a water dependent use. Decks associated with commercial properties are prohibited in or over Type 3, 4, 5, and 6 waters unless (i) the deck is to accommodate a designated priority use for that water area; (ii) the applicant has examined all reasonable alternatives and the council has determined that the selected alternative is the most reasonable; and (iii) the deck is the minimum necessary to support the priority use.

6. See Section 110 (specifically Table 1A) for a listing of additional prohibitions.

adverse environmental or public health impact.

7. Applicants for commercial, industrial, and recreational structures shall demonstrate that adequate transportation and utility services to support the proposed operations and related activities are available.

D. Prohibitions

1. Industrial operations and structures are prohibited in Type 1 and 2 waters or on shoreline features abutting these waters.

E. Standards

1. General:

(a) See standards given in "Filling, Removing, or Grading of Shoreline Features" (Section 300.2), as applicable.

(b) See standards given in "Sewage Treatment and Disposal" (Section 300.6), as applicable.

(c) Commercial and Industrial docks, wharves and piers shall be designed and certified by a registered professional engineer.

2. Residential, commercial, industrial, and recreational buildings:

(a) Excavation and grading shall be restricted to those activities and areas necessary for the construction of the building and/or appurtenant structures (see Section 300.2).

(b) Applicants shall be required to reduce the inflow of pollutants carried by surface runoff in accordance with the policies and standards contained in Section 300.6 and as detailed in the most recent version of the *Rhode Island Stormwater Design and Installation Standards Manual.*

F. Flood Zone Construction

In many instances lands under the jurisdiction

of the CRMC are by virtue of their topographic position subject to flooding. The Federal Emergency Management Agency has evaluated the risk of flooding and has established 100 year return frequency elevations of the flood waters (i.e. the Base Flood Elevation, (BFE) for all of the State's coastal communities. The approximate limits of the flood zones and the associated Base Flood Elevations are shown on the FEMA's Flood Insurance Rate Maps, which are commonly available at each communities building official's office.

In recognition that structures located within Flood Hazard Zones must be designed to meet more severe conditions than those not, the Rhode Island State Building Code, (RISBC) contains specific requirements for flood zone construction. (Reference RISBC-8)

The CRMC requires all applicants proposing construction within flood hazard zones to demonstrate that all applicable portions of the RISBC and more specifically RISBC-8 are to be met.

This demonstration shall be made by submitting to the CRMC at the time of application a building official's form properly completed and signed by the local building official.

G. Guidelines for Construction in Flood Hazard Zones

In addition to the requirements of the RISBC, the CRMC suggests that applicants incorporate the following items into their proposed designs:

1. For construction in wave velocity (V) zones as defined by Federal Flood Insurance Rate Maps:

(a) If timber pilings are used, they should meet the American Society for Testing and Materials (ASTM) standards for Class B piles and shall have a minimum tip diameter of 8 inches. Wooden pilings should be treated with a wood preservative. Bracing between piles is recommended.

(b) Pilings in ocean fronting areas should penetrate no less than 10 feet below mean sea level.

(c) Floor joists should be secured with hurricane clips where each joist encounters a floor beam. These metal fasteners or straps should be nailed on the joist as well as on the beam.

(d) To secure the exterior wall to the floor joists, galvanized metal strap connections should be used connecting the exterior wall studs to the joists.

(e) Roof trusses or rafters should be connected to the exterior wall with galvanized metal straps.

2. For construction in coastal stillwater (A) Flood Zones.

(a) Items a, b, c, d, e as listed for V zone construction should, if applicable, be employed.

(b) Parallel concrete walls or pilings rather than fill should be used to elevate habitable residential structures when six (6) feet or more clearance exists between the existing grade and the flood plain elevation.

In areas subject to minimal wave action in a 100-year storm event, discontinuous reinforced-concrete foundation walls which allow sufficient free flow of flood waters may be substituted for parallel concrete walls or pilings.